

10

FIG. 1

664260 25E10160

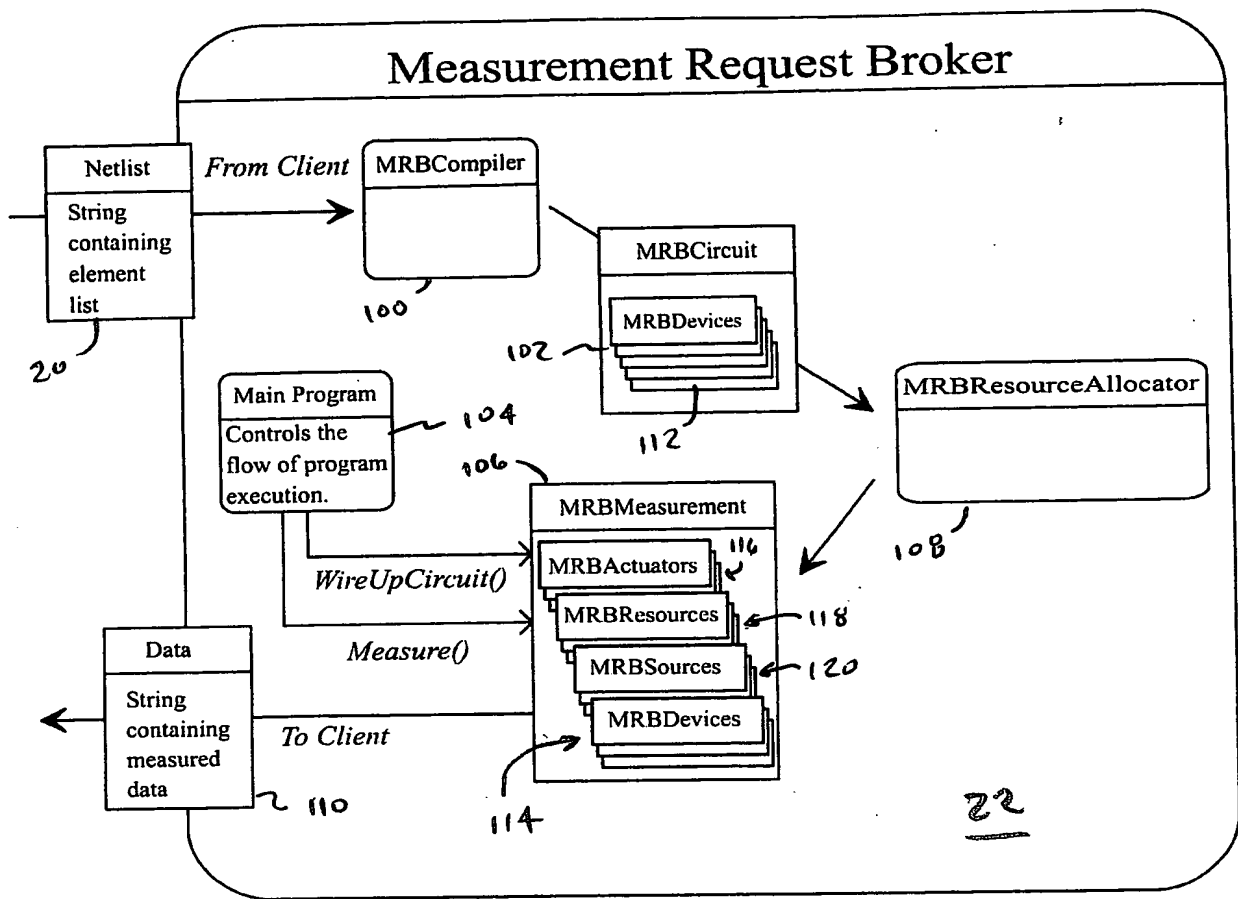


Figure 2.

When a user connects to the website they first see the following screen:

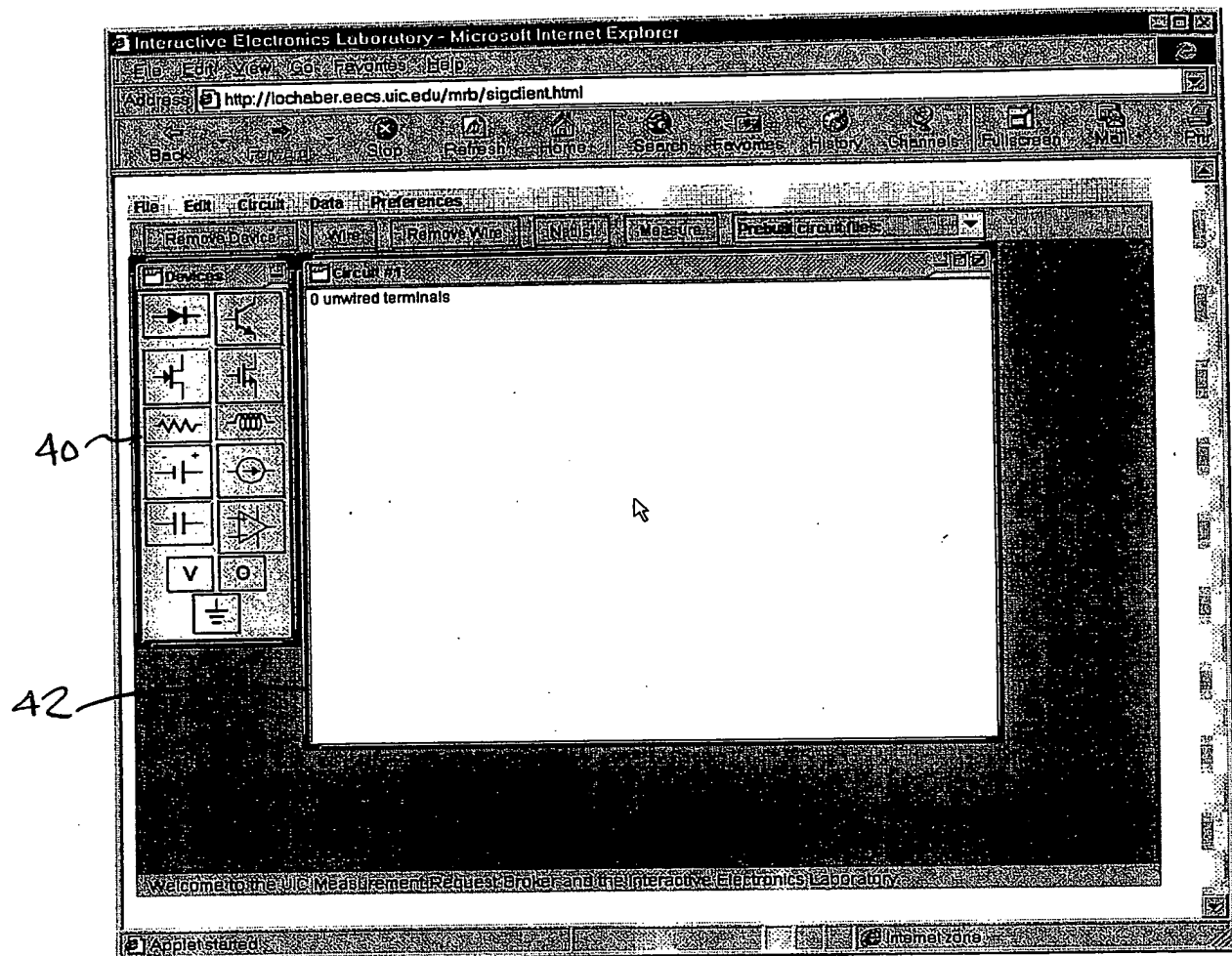
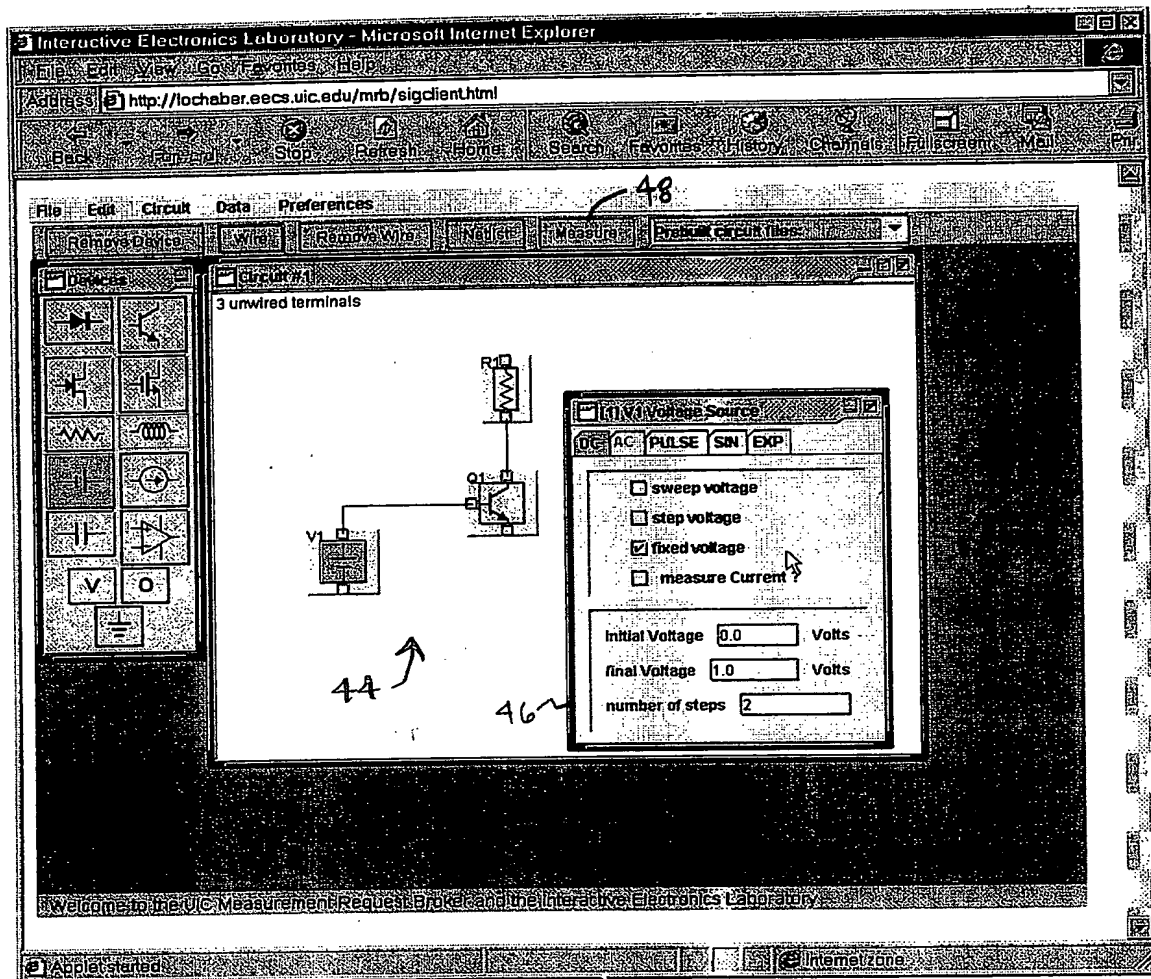


FIG. 3

Properties of devices such as voltage sources are adjusted by selecting the device and then filling in entries in a dialog box.



A complete set of instructions for drawing circuits is available online at the URL:  
<http://www.mal.uic.edu/marble/building.htm>

FIG. 4

An alternative is to download a prebuilt circuit by selecting from the pulldown menu of: "Prebuilt circuit files:".

An example is the "Switching transient" circuit:

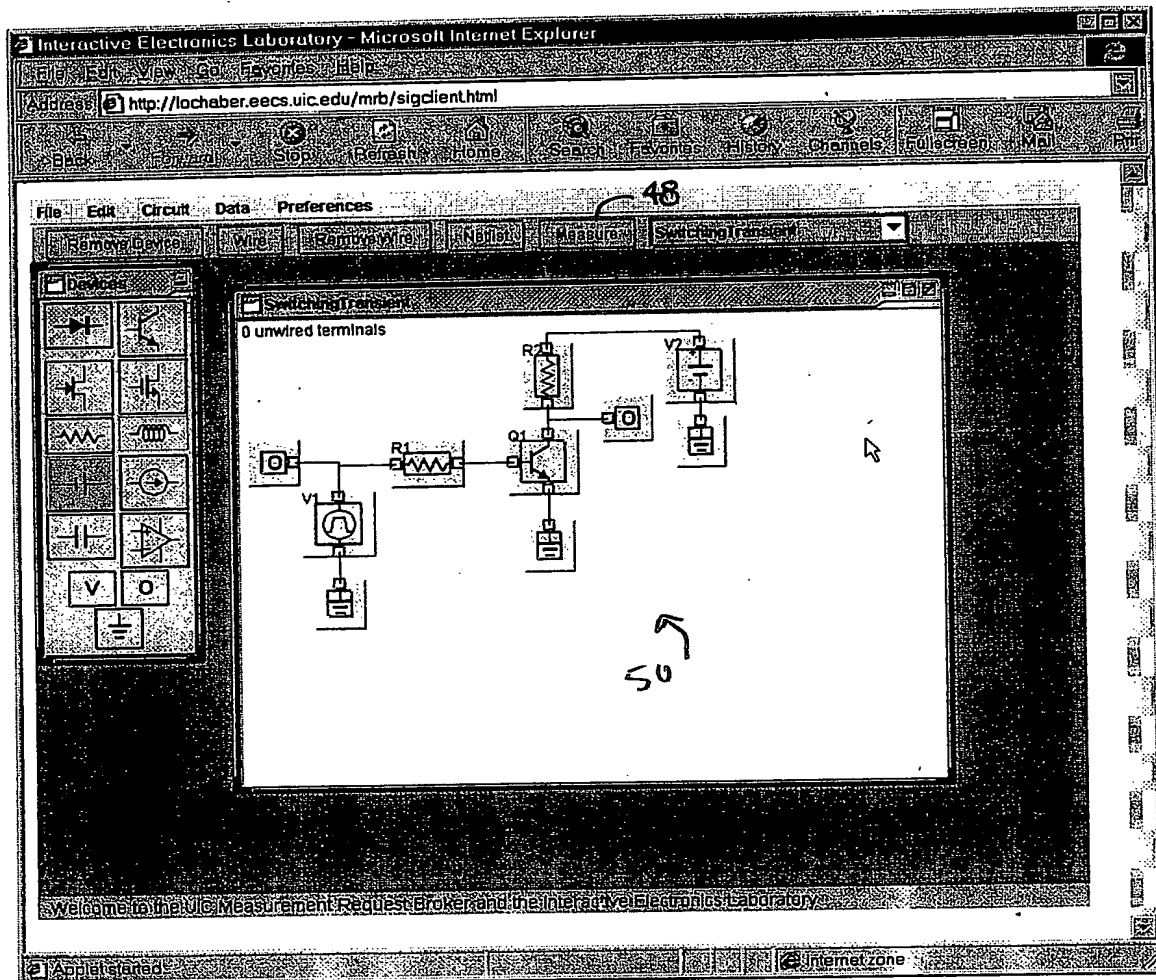


FIG. 5

The SPICE netlist associated with any circuit is viewable by selecting the "Netlist" button:

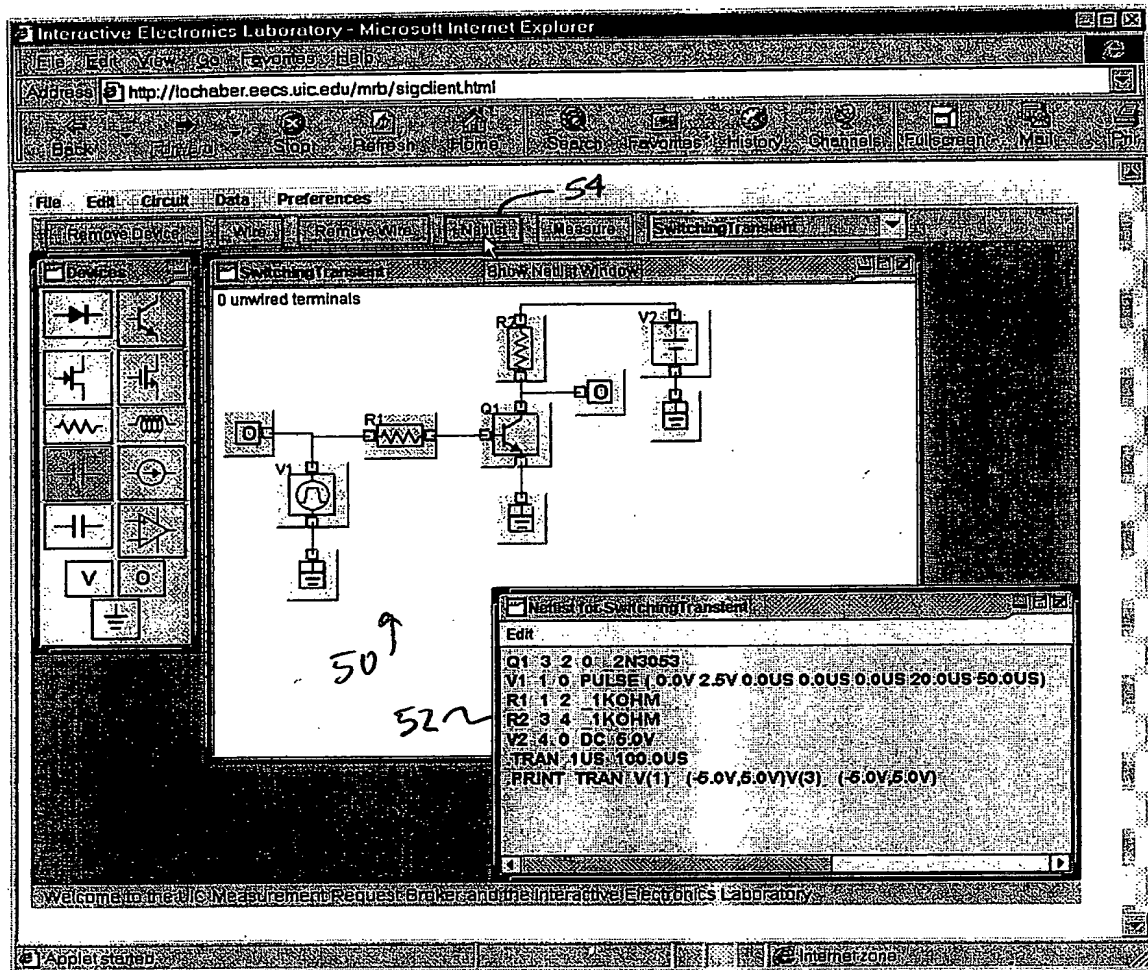
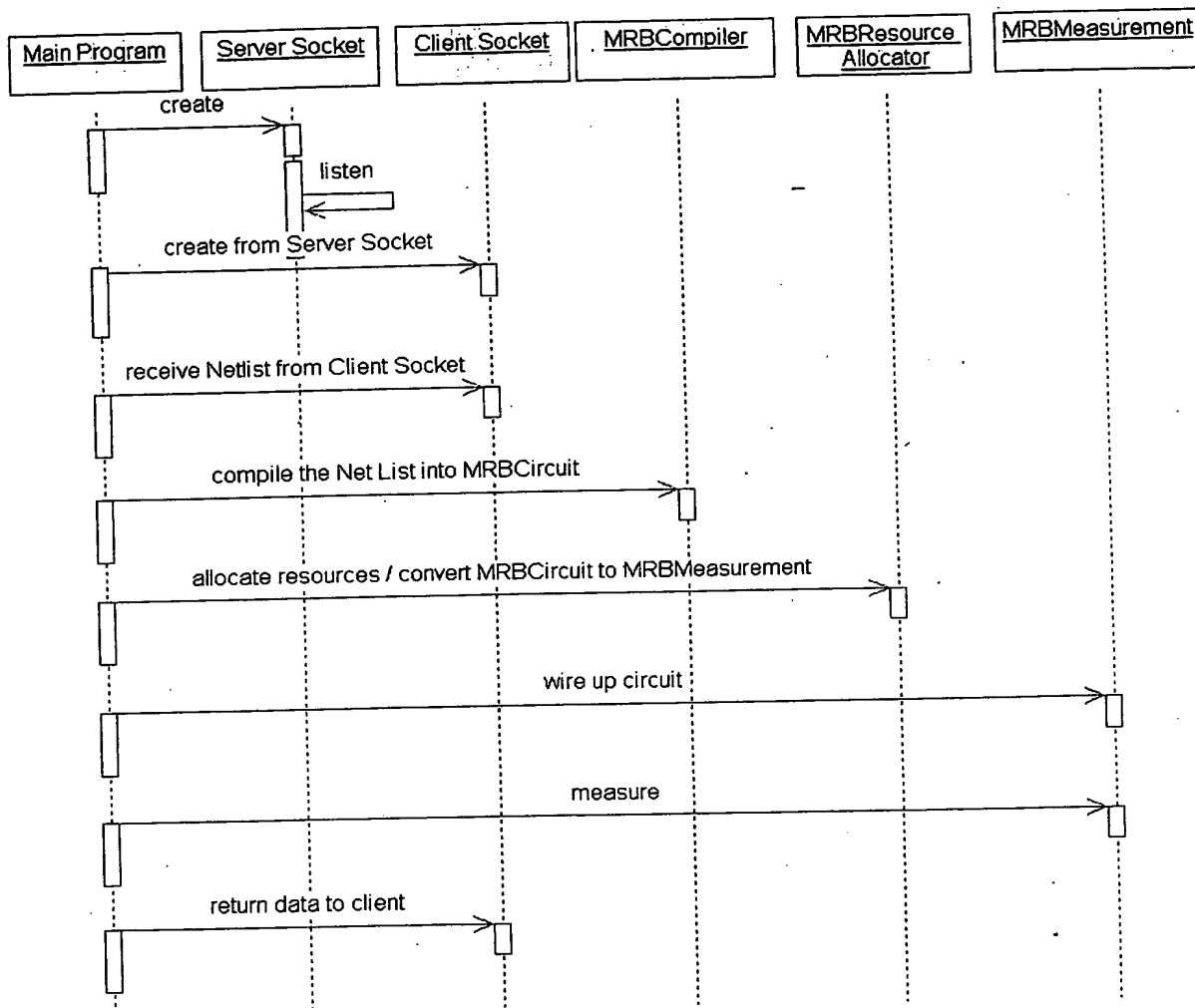


FIG. 6

## Operation of the Measurement Request Broker (MRB) server program

The overall operation of the MRB during a single transaction with the client java applet is outlined in the sequence diagram below.



The operation of the MRBResourceAllocator and MRBMeasurement are summarized by the following two state diagrams.

FIG. 7

002200-25CT0460

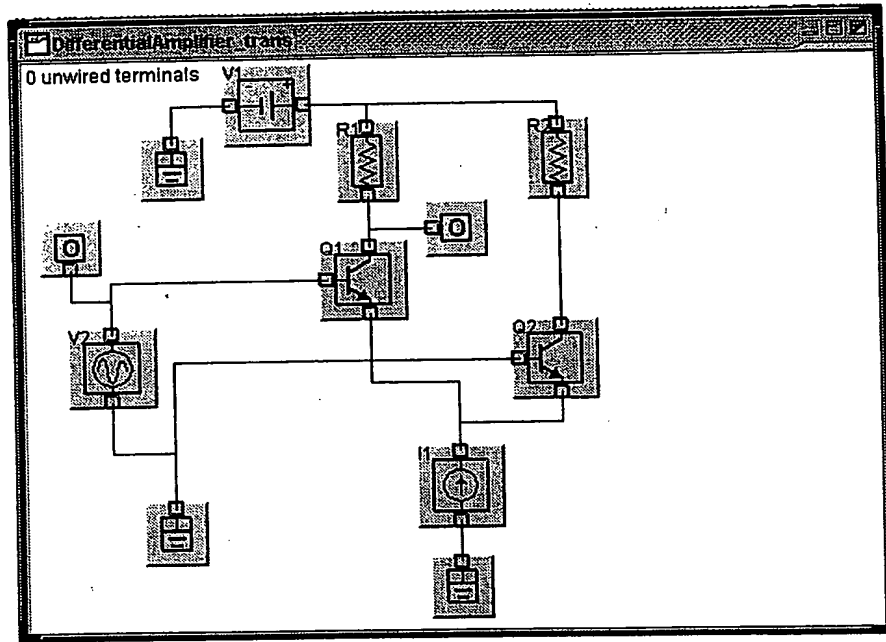


FIG. 8



Interactive Electronics Laboratory - Microsoft Internet Explorer

Address: <http://lochaber.eecs.uic.edu/mrb/sigclint.html>

File Edit Circuit Data Preferences

Remove Device Wire Remove Wire New Part Measure Switching Transient

Switching Transient  
0 unwired terminals

Graph: Switching Transient

Data: Switching Transient

t sweep	V	V
2.81E-5	0.195315	1.7182
2.82E-5	0.195315	1.8750
2.83E-5	0.195315	1.9922
2.84E-5	0.156252	2.1484
2.85E-5	0.195315	2.2656
2.86E-5	0.195315	2.3828
2.87E-5	0.195315	2.4609
2.88E-5	0.195315	2.5781
2.89E-5	0.156252	2.6953
2.9E-5	0.156252	2.7734
2.91E-5	0.156252	2.8906
2.92E-5	0.156252	3.0078
2.93E-5	0.156252	3.0859
2.94E-5	0.195315	3.1641
2.95E-5	0.156252	3.2812
2.96E-5	0.195315	3.3594
2.97E-5	0.156252	3.3984
2.98E-5	0.156252	3.4766

Graph Control Panel

Cursor 1 Slope

V1 0.195315 Volts 0.0

V3 3.1641 Volts 976543.1

X << < > >> #

Time 2.94E-5 Seconds

Show slopes

Just sent to the Measurement server a netlist of length 208 bytes

Applied stored Internet zone

FIG. 9